(71)Name of Applicant:

(19) INDIA

(22) Date of filing of Application: 14/02/2024 (43) Publication Date: 23/02/2024

(54) Title of the invention : SYSTEM AND METHOD FOR ENDPOINT DETECTION WITH DYNAMIC ATTACK PROCESS TREE NAVIGATION

1)Chitkara University Address of Applicant: Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, :G06N0020000000, G06F0021550000, India. Patiala -----(51) International H04L0009000000, G06F0021570000, classification 2) Bluest Mettle Solutions Private Limited G06F0021560000 Name of Applicant: NA (86) International :NA Address of Applicant: NA Application No :NA (72) Name of Inventor: Filing Date 1)MISHRA, Rahul (87) International Address of Applicant :ODC-4, Panchshil Tech Park, inside : NA Publication No Courtyard by Marriott premises, Hinjewadi Phase - 1, Pune -(61) Patent of Addition:NA to Application Number :NA 411057, Maharashtra, India. Pune ------2)SINGH, Dhirai Filing Date Address of Applicant :ODC-4, Panchshil Tech Park, inside (62) Divisional to Courtyard by Marriott premises, Hinjewadi Phase - 1, Pune -:NA **Application Number** 411057, Maharashtra, India. Pune ------:NA Filing Date 3)GARG, Dhruv Address of Applicant: Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala -----

(57) Abstract:

An endpoint detection and response (EDR) system (102) with dynamic attack process tree is disclosed. The system (102) autonomously detects and identifies threats within endpoint devices (104) and network environments (106), employing real-time analysis of attack process trees to identify cyber attack patterns. A unique feature is the incorporation of a threat correlation engine, which correlates information from various sources, facilitating comprehensive threat analysis. The disclosed EDR system adapts to evolving cyber threats by utilizing machine learning to dynamically evaluate issue severity and activate tailored responses. Furthermore, the system (102) contributes to building resilient digital infrastructures in alignment with sustainable development goal 16. This system (102) combines threat detection, analysis, and adaptive response strategies for enhanced cybersecurity.

No. of Pages: 25 No. of Claims: 9